

Serial No.: 10/609,471
Docket No.: 28951.3123/C1

IN THE SPECIFICATION:

Please replace the paragraph beginning on page 1, line 10, with the following:

-- In recent years, various ~~many~~ appliances are used in houses, buildings, and on the floors and in the sections in the buildings. Attempts have been made to control such appliances by integrating them into a home network (or a home bus system) in order to attain a better living or working environment, less energy consumption, and good work efficiency.--

Please replace the paragraph beginning on page 1, line 24, and ending on page 2, line 7, with the following:

--More specifically, in the summer season, a water heater thermostat of a water heater in bathing hours is set at a lower temperature than in the winter season since a water heater for bath utilizing solar heat can often produce sufficient hot water and thus the temperature needs not be so high; even in the summer season the operation of an air conditioner is lowered during a very short time in which a microwave oven is used in order to reduce the electric power consumed at one time in a home as a whole; or in a room, output power or transmission of an air conditioner is controlled by detecting the presence of a human in the room with a sensor--

Please replace the paragraph beginning on page 2, line 9, with the following:

-- Other examples, ~~are such that~~ operating conditions of appliances serving as heat sources ~~that are being in operation (in use)~~, are detected and the output power of an air conditioner is controlled accordingly; unnecessary lightings in a room are turned off based on the

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hours and positions of appliances in operation (in use); and in a college, lightings and air conditioners are turned off in the classrooms in which classes are not being conducted.--

Please replace the paragraph beginning on page 3, line 12, with the following:

-- Further, the network may have other configurations than the one shown in the figure in which many appliances and sub-network are connected radially from only one CPU 10, but, as shown in Fig. 2A, many sub-networks each having a controller (not shown in the figure) and a router (a router is placed between a plurality of sub-networks to realize communication therebetween, and in Fig. 1, the CPU performs this function). In different systems and appliances, IC circuits or the like built into appliances perform this function.[][] are connected via a router provided in the edge parts of each constituent element of the sub-networks or via an appliance that performs the function of a router, or as shown in Fig. 2B, appliances and sub-networks are hierarchically connected as it were, forming trees.--

Please replace the paragraph beginning on page 3, line 24, with the following:

-- In the figure, reference numerals 20 denote networks, or appliances that ~~practically~~ serve serve as sub-networks, which are connected by infrared rays, power line, radio, or the like, and reference numerals 30 denote routers, or appliances that perform the function of routers, which are connected to a plurality of sub-networks.--

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Please replace the paragraph beginning on page 4, line 24, with the following:

-- Specifically, for example, in the case where an appliance 1 on a network B wants to transmit a message to an appliance 2 on a network C, shown in Fig. 3, first the appliance 1 needs to know to which router (either router A or B) within the network B the appliance should transmit the message (which implies a telegraphic message and uses, as the communication medium, sound, infrared rays, or the like) so that the appliance 2 on the network C receives the message. Thus, the appliance 1 needs to be fully equipped with a means (communication means) for that purpose. As a result, not only does the load of the appliance side increase ~~increases~~, ~~that~~ ~~in~~ but the initial setting of communication also increases. --

Please replace the paragraph beginning on page 7, line 9, with the following:

-- However, in practice, it is quite difficult to realize such conditions. Leastwise, in a home rather than in a home bus system, not only are communication means ~~are~~ limited, but also appliances to be included or possessed are added or eliminated one after another, which makes it impossible to understand the above-described information correctly.--

Please replace the paragraph beginning on page 14, line 12, with the following:

-- That is to say, when a router, especially an appliance other than a particular router, transmits a message to a different network appliance, a source appliance always transmits a message to the particular router, except for in the case where the message is transmitted to an appliance on the other one of the networks connected to the source appliance.--

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Please replace the paragraph beginning on page 21, line 2, with the following:

-- Furthermore, appliances connected to the home bus system are ~~almost~~ fixed by the types of the appliances. Specifically, today in Japan, every household has a gas stove, a telephone, and a television receiver, and a certain proportion of the population owns a facsimile or the like. Every apartment has a gas sensor. In addition, every hospital room for 4-6 people or every room of Japanese inns has a sensor and a television receiver which is a rented one in many cases, except for luxurious Japanese inns.--

Please replace the paragraph beginning on page 23, line 13, with the following:

-- Consequently, in either case, when activating appliances that have characteristics of operation, application, and activation of a microwave oven or the like and that consume a large amount of electric power (a minimum of 100 watts or more, at least 200 watts in many cases, 300 watts or more in general), the operation of other appliances is controlled, whereby the amount of electric power consumed at a time can be kept within limits. On such occasion, when a routing processing device according to claims 1 or 2 is employed, not only is equipment necessary for the appliances are simplified, but also the process for achieving the above-described purposes of a home bus system is securely conducted.--

Please replace the Abstract, beginning on page 33, line 2, with the following:

-- In a home bus system in which a multiplicity of networks each having a multiplicity of appliances connected thereto are connected to one another, information is easily exchanged

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between appliances over different networks. An address configuration that is processed in application software and communication middleware has a network ID and a network appliance ID. On each network, there is provided a particular router ~~having~~ that has information about all the connections of other networks ~~than the each network~~. Under this configuration, an appliance transmits a message directed to another network, only to a particular router and the particular router establishes an appropriate route for transmission, ~~as considering~~ based on the actual states of the networks.--